WIRELESS SMOKE ALARM INTERCONNECT BASE
MODEL 51000-300

GENERAL INFORMATION

The Wireless Smoke Alarm Interconnect Base part number 51000-300 is a 120V AC powered sensor. It monitors the interconnect line on interconnected hardwired smoke alarm systems and sends out a transmission when any of the smoke alarm units on the same circuit enter an alarm state. The device has LEDs to visually indicate the status of the interconnect base. A single CR2032 battery provides backup power in the event that AC power is lost on the alarm system circuit. The Wireless Smoke Alarm Interconnect Base communicates with a compatible control panel and can send alarm, low battery, AC power loss, and supervisory messages to the system's receiver.

Contents of Carton:

- 1–Wireless Smoke Alarm Interconnect Base
- 2– 2" long 10-32 Screws
- 1– CR 2032 3 Volt Coin Battery

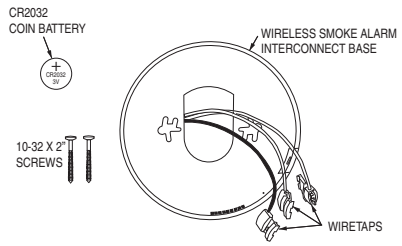


Figure 1. 51000-300 Kit

IMPORTANT: This device must be tested and maintained regularly. This device is intended for use with compatible smoke alarms, but will not detect the presence of smoke, heat, or fire directly.

✓ ***Note:*** Each of the smoke alarms part of interconnected smoke alarms must be:

- Present in every required location per NFPA 72,11.5.1
- Confirmed as less than ten years from date of installation (or manufacture). Please check label on the device or original smoke detector device manual.
- Hardwired to a single, common 120V AC circuit designated for interconnected smoke alarms.
- Pass the manufacturer's stated testing regimen to confirm proper interconnect operation.
- Have fresh back-up batteries.
- On the list of compatible models (any model not listed may work but has not been compatibility tested).
- This device shall not be installed in locations where the normal ambient temperature is below 40F(4.4C) or exceeds 100F (37.8C), unless the alarm has been determined capable of being used at installation points with higher or lower ambient temperatures.
- Please see section at the end regarding information on the proper installation of smoke alarms that are intended to work with the Wireless Smoke Alarm Interconnect Base. This device is not intended to work with smoke alarms paired with smoke alarm guards, unless the combination has been evaluated and found suitable for this purpose.

Compatible Smoke Alarm Models

- BRK Brands Model 7010B: AC Powered Photoelectric Smoke Alarm with Battery Backup
- Firex Kidde Model i4618: Hardwire Ionization Smoke Detector with Battery Backup
- First Alert BRK Model 9120B: Hardwired Smoke Alarm with Battery Backup
- Kidde Model i12040: 120V AC Wire-in Smoke Alarm with Battery Backup
- USI Electric Model 5304: Hardwired Ionization Smoke and Fire Alarm with Battery Backup

CAUTION: Before attempting installation, locate the primary electrical circuit that powers the interconnected hardwired smoke alarm system and shut off or disconnect power to this circuit. An electrical shock hazard is present if this electrical circuit is not temporarily disabled during installation.

AVERTISSEMENT: Avant de commencer l'installation, trouver le circuit électrique principal qui alimente le système câblé de détection de fumée interconnecté et l'éteindre ou couper l'alimentation de ce circuit. Un risque d'électrocution est présent si ce circuit électrique n'est pas temporairement coupé pendant l'installation.

WARNING: Remember to turn on or reconnect power to the primary electrical circuit that powers the interconnected hardwired smoke alarm system. The fire warning system may be disabled if electrical power is not restored to the system.

ATTENTION : Ne pas oublier d'établir ou de rétablir le courant du circuit électrique principal qui alimente le système câblé de détection de fumée interconnecté. Le système d'alerte incendie serait inopérant si le courant électrique alimentant le système n'était pas rétabli.

Install Wireless Interconnect Base

Select a smoke alarm that will be used to provide power and communicate to the wireless interconnect base. Any smoke alarm that is within range of a compatible wireless receiver can be selected if the smoke alarm is part of an interconnected hardwired system.

Remove the existing smoke alarm from the existing mounting bracket. This is usually done by twisting the alarm counter clockwise or clockwise from where it is mounted.

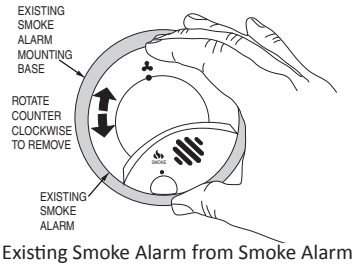


Figure 2. Remove Existing Smoke Alarm from Smoke Alarm Mounting Base

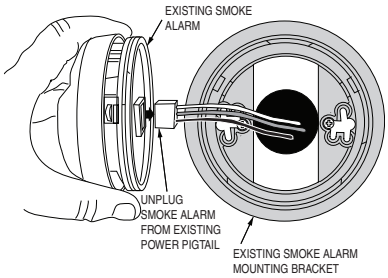


Figure 3. Unplug Pigtail of Existing Smoke Alarm

Unplug the existing smoke alarm from the smoke alarm pigtail. Loosen the two screws used to hold the existing mounting bracket and remove it from the wall or ceiling.

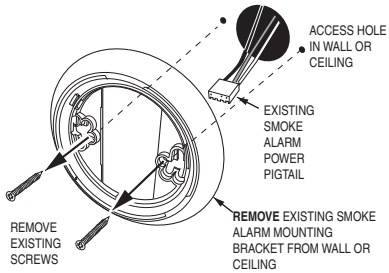


Figure 4. Remove Existing Smoke Alarm Mounting Bracket from Wall or Ceiling

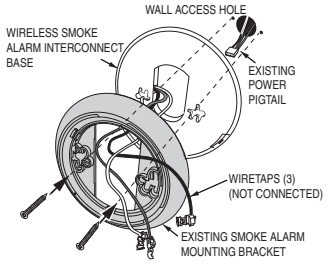


Figure 5. Install Wireless Smoke Alarm Interconnect Base between Wall and Mounting Bracket

Place the interconnect base where the existing mounting bracket was located. Make sure the wire/wiretaps are inserted through the center opening of the smoke alarm mounting bracket.

Place the existing smoke alarm mounting bracket on top of interconnect base. Align the interconnect base and the smoke alarm mounting bracket and replace the two screws used to hold the bracket in place. Tighten all screws down.

✓ ***NOTE:*** It is suggested that the smoke alarm sensor LEDs be oriented towards the bottom or in a manner that allows the LEDs on the unit to be visible.

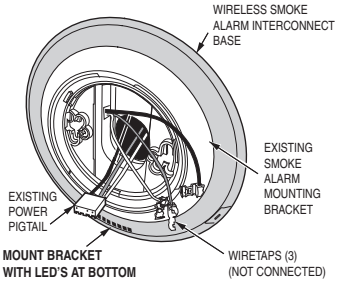


Figure 6. Wiretaps/Wires, & Pigtail through Center

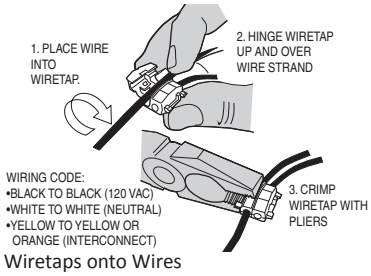


Figure 7. Crimping Wiretaps onto Wires

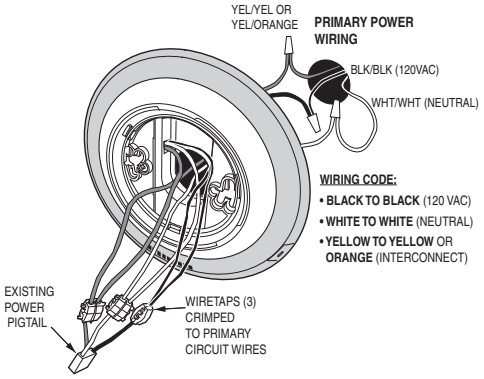


Figure 8. Wiretap Connections

Wiring the Connections

Before connecting the wires from the interconnect base, identify the (+) line (hot) 120VAC wire and the neutral wire. Usually the (+) line (hot) 120VAC wire will be **black** and the **neutral** wire white. Use a voltmeter or voltage sensor to verify that the proper wires are selected. You may need to reconnect power to the electrical circuit powering the interconnected hardwired smoke detectors in order to do this (Figure 8).

WARNING: Remember to disconnect or shut off electrical power to the interconnected hardwired smoke detector if it was powered on in the previous step to identify the 120VAC wires.

Use an electrician's linesman plier or equivalent tool (See Figure 8) and using the installed wiretaps on the device, crimp the wiretap with the black wire onto the 120VAC line (hot) wire.

ATTENTION : Ne pas oublier de déconnecter ou couper le courant électrique pour le détecteur de fumée câblé s'il avait été alimenté auparavant pour identifier les fils 120 AC. Utiliser une pince d'électricien ou un outil équivalent (voir image 8) et en utilisant les connecteurs installés sur l'appareil, sertir le connecteur avec le fil noir sur la ligne 120VAC (positif).

✓ ***NOTE:*** Wiretaps must be used on a section of stranded wire. This is typically located between the connector to the smoke detector and the wire nut.

The wiretap with the yellow wire should be attached to the wire lead connected to the interconnect wire of the smoke detector. This wire is typically yellow or orange.

Once all (3) three wiretaps have been installed (Figure 8), reattach the electrical wire pigtail to the back of the smoke detector unit and mount the smoke alarm on the mounting base (Refer to Figure 3).

Installing the Back-Up Battery

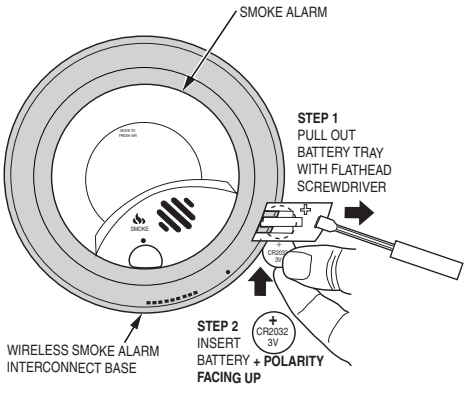


Figure 9. Installing Back-up Battery

WARNING: Ensure that the interconnect base has been wired correctly. Damage to the interconnect base may occur if the 120 VAC line (hot) wire neutral wire are reversed. The unit may fail to function properly if incorrectly wired.

Turn on or reconnect power to the primary electrical circuit that powers the interconnected hardwired smoke alarm system. The device should now power on.

Use a flat bladed tool, slide out the battery tray that holds the backup battery. Insert a CR2032A battery (included) into the battery slot. Slide the battery tray back into the device (Figure 9).

ATTENTION : S'assurer que le détecteur de fumée a été branché correctement. Le capteur du détecteur de fumée pourrait être endommagé si le fil de la ligne 120AC (positif) et le fil neutre sont inversés. L'appareil pourrait ne pas fonctionner correctement s'il était mal branché. Etablir ou rétablir le courant du circuit électrique principal qui alimente le système câblé de détection de fumée. L'appareil devrait à présent s'allumer. Utilisant un outil à lame plate, coulisser le tiroir de la pile de sécurité. Insérer une pile CR2032A (incluse) dans l'emplacement. Coulisser à nouveau le tiroir pour le refermer (image 9).

✓ ***NOTE:*** Orient the (+) battery terminal up so that it is visible when facing the unit.

Programming the Wireless Smoke Alarm Interconnect Base

Follow the instructions on how to program a sensor into a compatible control panel. See the control panel's Installation & Programming Guide for more information on how to learn a sensor into the control panel.

The device should learn in as a sensor device. Use a small paper clip or other sharp object and carefully insert into the learn/test button hole. This will send out an alarm transmission ID so the the sensor can be learned into a compatible control panel or can be used to test that the transmitter is working properly.

Replacing the Battery

If the compatible control panel shows that this sensor has a low battery, the backup battery may need to be replaced.

Use a flat headed screw driver or other tool to slide the battery tray out of the device. Remove the battery from the tray and replace with a new CR2032A battery. Slide the battery tray back into the unit, making sure that the tray is fully inserted into the unit.

✓ ***NOTE:*** Use Panasonic CR2032A batteries or equivalent. Use of another battery may damage or negatively affect the operation of the device.

End-of-Life

The Wireless Smoke Alarm Interconnect Base does not have an End-of-Life (EOL), however the smoke alarm(s) that this device monitors may have an EOL condition. Follow the owner's manual for the smoke alarm regarding instructions on proper smoke alarm EOL conditions.

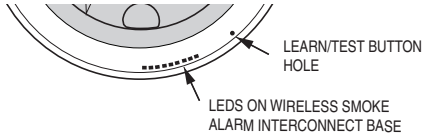
LED Status

Status	LEDs	Radio Signaling
PowerOn	Sequential green, orange, red flashes	N/A
Normal	Green LED flash every 48s	N/A
Alarm	Red flash every 1s	Alarm
Loss of AC Power Fault	Orange flash every 20s	Tamper
Low Battery Fault	Orange flash every 4s	Low Battery
Learn Button	Sequential green, orange, red flashes	Alarm

Testing the Smoke Alarm System

Figure 10. Location of LEDs and Learn/Test Button Hole

The device should be tested in accordance with NFPA 72 guidelines. The following instructions are intended to provide a general guideline on how to test the smoke alarm system, wireless smoke alarm interconnect base and communications to an alarm panel. Follow the smoke alarm instruction manual on testing the smoke alarm and any interconnected units. There usually is a test button on the smoke alarm that can be



pressed to initiate a test mode. This should cause the sounder to alarm and also any smoke alarms that are interconnected to also alarm.

The interconnect base should send out a transmission to a compatible alarm panel.

If this transmission is not received, first check if the Smoke alarm is properly programmed into a compatible alarm panel. Please follow the alarm panel instructions on learning in a sensor.

Also, check that the interconnect wire on the smoke alarm is properly connected to the Wireless Smoke Alarm Interconnect Base. The LEDs on the interconnect base should flash red indicating that it has received the alarm signal from the smoke alarm .

Testing the Wireless Smoke Alarm Interconnect Base Radio Transmission Only

The Wireless Interconnect Base incorporates a small test button. This test button can be activated by inserting a straightened paper clip or sharp object into the Learn/Test hole. The Smoke Detector Sensor will then send an alarm signal transmission to a compatible alarm panel. This can be used to test that the Wireless Smoke Alarm Interconnect Base will send a proper transmission to an alarm panel. This DOES NOT test if the wiring between the smoke alarm and the interconnect base is correct.

Troubleshooting Installation Chart

When testing the Wireless Smoke Alarm Interconnect Base sensor, check for these common issues.

Condition Smoke Alarm	Result		Resolution
	Wireless Smoke Alarm Interconnect Base LED	Alarm Panel	
Smoke detector is in alarm mode	LED on interconnect base do not work properly	Alarm panel does not receive alarm signals	Check to make sure interconnect wire from the smoke alarm is properly connected to the interconnect base
Smoke detector is in alarm mode	LED on interconnect base sensor works properly	Alarm panel does not receive alarm signals	Check to make sure the interconnect base is properly learned or programmed into a compatible alarm panel

Specifications

Input Power	120VAC 50/60Hz 12W
Backup Power	3-Volt CR2032 Battery or Equivalent
Backup Battery Life	>8 years
Operating Temperature	32°F to 122°F (0°C to 50°C)
Operating Humidity	5–95% RH non-condensing
Compatibility	ADT Lynx and ADT Vista
Wireless Signal Range	350ft (110m)
Supervisory Interval	70 minutes
Certification	FCC/IC and ETL

FCC Notice

This device complies with Part 15 of the FCC's 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. 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 or more 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. To satisfy FCC/IC RF exposure safety requirements, a separation distance of 20 cm or more should be maintained between this device and person's body (excluding extremities: hands, wrists, feet, and ankles).

NOTE: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada (IC) Compliance

This device complies with Industry Canada license-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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1 l'appareil ne doit pas produire de brouillage, et 2 l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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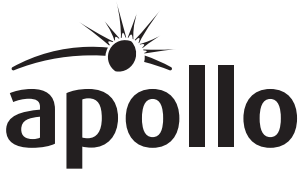

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